

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-30. (Canceled)

31. (Currently Amended) A video calling system comprising:

a) a video camera arranged to produce local video images representative of a local video call participant;

b) a transmitter arranged to receive said local video images and send information relating to said local video images to a remote receiver and a receiver arranged to receive information relating to remote video images representative of a remote participant in the video call via a communications link;

c) a local video display arranged to display video images to said local video call participant; and

d) an image generator arranged to receive said local video images and information relating to said remote video images, and generate combined video images for display on said local video display by combining said local and remote images such that ~~the images of the participants appear to be overlaid one on top of the other in substantial alignment~~ both the face of the local participant and the face of the remote participant are:

(i) displayed one on top of the other in substantial alignment; and

(ii) simultaneously displayed in the region in which each one of the faces overlies the other face.

32. (Previously Presented) A system according to claim 31, and further comprising:
an image processor arranged to process said local video images and/or said remote video images according to one or more respective image processing operations, and to output processed versions of the local and/or remote video images to the image generator as input thereto;

wherein said image processing operations are operable to process said video images such that the respective participants of the local and remote video images are separably distinguishable in the combined image generated by the image generator.

33. (Previously Presented) A system according to claim 32, wherein one of the image processing operations comprises an image contrast enhancement operation.

34. (Previously Presented) A system according to claim 33 wherein the image contrast enhancement operation comprises detecting edges within the input image to produce an edge map, applying a threshold operation to the input image to produce a thresholded image, and combining the edge map with the thresholded image to produce the processed image.

35. (Previously Presented) A system according to claim 32, wherein one of the image processing operations comprises processing to render the processed image of increased opacity.

36. (Currently Amended) A video calling system comprising:

a) a video camera arranged to produce local video images representative of a local video call participant;

b) a transmitter arranged to receive said local video images and send information relating to said local video images to a remote receiver and a receiver arranged to receive information relating to remote video images representative of a remote participant in the video call via a communications link;

c) a local video display arranged to display video images to said local video call participant;

d) an image generator arranged to receive said local video images and information relating to said remote video images, and generate combined video images for display on said local video display by combining said local and remote images such that the images of the participants appear to be overlaid one on top of the other in substantial alignment; and

e) an image processor arranged to process said local video images and/or said remote video images according to one or more respective image processing operations, and to output processed versions of the local and/or remote video images to the image generator as input thereto; wherein

said image processing operations are operable to process said video images such that the respective participants of the local and remote video images are separably distinguishable in the combined image generated by the image generator; and

~~A system according to claim 32, wherein:~~

the local video images are processed according to an image contrast enhancement operation, and the remote video images are processed to render the processed image of increased opacity; or

the remote video images are processed according to an image contrast enhancement operation, and the local video images are processed to render the processed image of increased opacity.

37. (Previously Presented) A system according to claim 32, wherein the remote video images are not processed by the image processor and the image generator operates to overlay the respective processed local video images onto the received remote video images.

38. (Previously Presented) A system according to claim 32, wherein the image processor is further operable to process the local video images twice to produce two processed versions of the local images; wherein a first processed version of each image is input to the image generator as input thereto, and a second processed version of each image is input to the transmitter for transmission thereby.

39. (Previously Presented) A system according to claim 38, wherein different image processing operations are applied to the local video images to produce the first processed versions and the second processed versions respectively.

40. (Currently Amended) A video calling system comprising:
a) a video camera arranged to produce local video images representative of a local video call participant;
b) a transmitter arranged to receive said local video images and send information relating to said local video images to a remote receiver and a receiver arranged to receive information

relating to remote video images representative of a remote participant in the video call via a communications link;

c) a local video display arranged to display video images to said local video call participant;

d) an image generator arranged to receive said local video images and information relating to said remote video images, and generate combined video images for display on said local video display by combining said local and remote images such that the images of the participants appear to be overlaid one on top of the other in substantial alignment; and

e) an image processor arranged to process said local video images and/or said remote video images according to one or more respective image processing operations, and to output processed versions of the local and/or remote video images to the image generator as input thereto; wherein

said image processing operations are operable to process said video images such that the respective participants of the local and remote video images are separably distinguishable in the combined image generated by the image generator;

the image processor is further operable to process the local video images twice to produce two processed versions of the local images; wherein a first processed version of each image is input to the image generator as input thereto, and a second processed version of each image is input to the transmitter for transmission thereby;

different image processing operations are applied to the local video images to produce the first processed versions and the second processed versions respectively;

A system according to claim 39, wherein:

the first processed versions of the local video images are produced by processing the local video images according to an image contrast enhancement operation, and the second processed versions of the local video images are produced by processing the local video images according to render the processed image of increased opacity; or

the second processed versions of the local video images are produced by processing the local video images according to an image contrast enhancement operation, and the first processed versions of the local video images are produced by processing the local video images to render the processed image of increased opacity.

41. (Previously Presented) A system according to claim 31, wherein the local image includes the local user's head, and/or the remote image includes a remote user's head.

42. (Currently Amended) A video calling system comprising:

a) a virtual reality unit arranged to produce virtual reality style images of a local video call participant;

b) a transmitter arranged to receive said virtual reality style images and to send information relating to said virtual reality style images to a remote receiver, and a receiver to receive information relating to remote video images representative of a participant in the video call via a communications link;

c) a local video display arranged to display video images to said local video call participant; and

d) an image generator arranged to receive said local video images and said information relating to remote video images and to generate combined video images for display on said local

video display by combining the virtual reality style image of the local participant with the image of the remote participant such that ~~the images of the participants appear to be overlaid one on top of the other in substantial alignment~~ both the face of the local participant and the face of the remote participant are:

(i) displayed one on top of the other in substantial alignment; and

(ii) simultaneously displayed in the region in which each one of the faces overlies the other face.

43. (Currently Amended) A video calling method comprising:

- a) producing local video images representative of a local video call participant;
- b) sending information relating to said local video images and receiving information

relating to remote video images representative of a participant in the video call via a communications link;

c) displaying video images to said local video call participant; and

d) generating combined video images for display by combining the video image of the local participant with the video image of the remote participant such that ~~the images of the participants appear to be overlaid one on top of the other in substantial alignment~~ both the face of the local participant and the face of the remote participant are:

(i) displayed one on top of the other in substantial alignment; and

(ii) simultaneously displayed in the region in which each one of the faces overlies the other face.

44. (Previously Presented) A method according to claim 43, and further comprising:

processing said local video images and/or said remote video images according to one or more respective image processing operations, and using processed versions of the local and/or remote video images to the generating step as input thereto;

wherein said image processing operations are operable to process said video images such that the respective participants of the local and remote video images are separably distinguishable in the combined image generated by the generating step.

45. (Previously Presented) A method according to claim 44, wherein one of the image processing operations comprises an image contrast enhancement operation.

46. (Previously Presented) A method according to claim 45 wherein the image contrast enhancement operation comprises detecting edges within the input image to produce an edge map, applying a threshold operation to the input image to produce a thresholded image, and combining the edge map with the thresholded image to produce the processed image.

47. (Previously Presented) A method according to claim 44, wherein one of the image processing operations comprises processing to render the processed image of increased opacity.

48. (Currently Amended) A video calling method comprising:
a) producing local video images representative of a local video call participant;
b) sending information relating to said local video images and receiving information
relating to remote video images representative of a participant in the video call via a
communications link;

c) displaying video images to said local video call participant;

d) generating combined video images for display by combining the video image of the local participant with the video image of the remote participant such that the images of the participants appear to be overlaid one on top of the other in substantial alignment; and

e) processing said local video images and/or said remote video images according to one or more respective image processing operations, and using processed versions of the local and/or remote video images to the generating step as input thereto; wherein

said image processing operations are operable to process said video images such that the respective participants of the local and remote video images are separably distinguishable in the combined image generated by the generating step; and

~~A method according to claim 44, wherein:~~

the local video images are processed according to an image contrast enhancement operation, and the remote video images are processed to render the processed image of increased opacity; or

the remote video images are processed according to an image contrast enhancement operation, and the local video images are processed to render the processed image of increased opacity.

49. (Previously Presented) A method according to claim 44, wherein the remote video images are not processed by the image processing step, and the generating step operates to combine the respective processed local video images onto the received remote video images.

50. (Previously Presented) A method according to claim 44, wherein the image processing step further includes processing the local video images twice to produce two processed versions of the local images; wherein a first processed version of each image is used by the generation step as input thereto, and a second processed version of each image is sent to a remote terminal via the communication link.

51. (Previously Presented) A method according to claim 50, wherein different image processing operations are applied to the local video images to produce the first processed versions and the second processed versions respectively.

52. (Currently Amended) A video calling method comprising:
a) producing local video images representative of a local video call participant;
b) sending information relating to said local video images and receiving information relating to remote video images representative of a participant in the video call via a communications link;
c) displaying video images to said local video call participant;
d) generating combined video images for display by combining the video image of the local participant with the video image of the remote participant such that the images of the participants appear to be overlaid one on top of the other in substantial alignment; and
e) processing said local video images and/or said remote video images according to one or more respective image processing operations, and using processed versions of the local and/or remote video images to the generating step as input thereto; wherein

said image processing operations are operable to process said video images such that the respective participants of the local and remote video images are separably distinguishable in the combined image generated by the generating step;

the image processing step further includes processing the local video images twice to produce two processed versions of the local images; wherein a first processed version of each image is used by the generation step as input thereto, and a second processed version of each image is sent to a remote terminal via the communication link;

different image processing operations are applied to the local video images to produce the first processed versions and the second processed versions respectively; and

~~A method according to claim 51, wherein:~~

the first processed versions of the local video images are produced by processing the local video images according to an image contrast enhancement operation, and the second processed versions of the local video images are produced by processing the local video images to render the processed image of increased opacity; or

the second processed versions of the local video images are produced by processing the local video images according to an image contrast enhancement operation, and the first processed versions of the local video images are produced by processing the local video images to render the processed image of increased opacity.

53. (Previously Presented) A method according to claim 43, wherein the local image includes the local participant's head, and/or the remote image includes a remote participant's head.

54. (Currently Amended) A video calling method comprising:

a) producing virtual reality style images representative of a local video call participant;

b) sending information relating to said virtual reality style images and receiving

information relating to remote video images representative of a participant in the video call via a communications link;

c) displaying video images to said local video call participant; and

d) generating combined video images for display by combining the virtual reality style

image of the local participant with the image of the remote participant such that ~~the images of the participants appear to be overlaid one on top of the other in substantial alignment~~ both face of the local participant and the face of the remote participant are:

(i) displayed one on top of the other in substantial alignment; and

(ii) simultaneously displayed in the region in which each one of the faces overlies

the other face.

55. (Currently Amended) A system according to claim 32, the system further

comprising a quality measurer for determining a measure of at least one characteristic indicative of image quality for the local video images, the image generator being responsive to an indication of the measured quality, such that at least one visible characteristic of the combined images of the local video call participant is dependent on the image quality of the local video images.

56. (Previously Presented) A system according to claim 55, wherein the degree to which the combined images relating to the local video call participant are opaque is dependent on the image quality of the local video images.

57. (Currently Amended) A non-transitory computer readable storage medium storing a computer program or any one or more of a suite of computer programs such that when executed by a computer or collectively by a plurality of computers it/they cause the computer or computers to perform the method of claim 43.

58. (Previously Presented) A method according to 43, including the further step of evaluating the quality of the local video images, wherein a visible characteristic of the local participant in the generated combined video images is chosen in dependence on the evaluated quality of the local video image.

59. (Currently Amended) ~~a~~A method according to claim 58, wherein the visible characteristic is the degree of transparency or visibility of the local participant in the combined image.